



## *COMMONWEALTH of VIRGINIA*

### DEPARTMENT OF TRANSPORTATION

1401 EAST BROAD STREET  
RICHMOND, VIRGINIA 23219-2000  
VirginiaDOT.org

**GREGORY A. WHIRLEY**  
ACTING COMMISSIONER

### MEMORANDUM

TO: New Products Applicants

FROM: VDOT New Products Committee

SUBJECT: New Products Application

The Virginia Department of Transportation's (VDOT's) New Product Evaluation Program is intended for products that are not covered by specifications, plans, or other Department standards. The information you provide in the attached application will be used for a preliminary evaluation to determine if it meets the qualifications of a New Product.

You will be notified with the decision of VDOT's New Products Committee. If your product is chosen for further review, you may be contacted for additional information. If your product is found to be classified by a specification or standard, you will be directed to the appropriate VDOT personnel. This procedure is designed to aid your company as well as VDOT in a thorough review with a prompt response.

Please attach trade literature, test data, Materials Safety Data Sheets, product specifications, instructions, and guarantee. Please send a minimum of five copies of color photographs, pamphlets, booklets, binders or other professionally produced materials.

Send application and attachments to:

Virginia Department of Transportation  
Materials Division  
1401 East Broad Street  
Richmond, VA 23219  
Attn: Ginger Bogan



## GENERAL, NON-SPECIFIC HAZARDOUS MATERIALS REQUIREMENTS

Unless specific criteria has been established for the product/material category, new products/materials that will be applied to VDOT Right of Way shall meet the following criteria.

### *Potential Waste Characterization*

No product that is applied to or placed on the land (i.e., Used in a Manner Constituting Disposal) shall exhibit the toxic metal, volatile, and semi-volatile concentrations of constituents identified as a characteristic hazardous waste per Code of Federal Regulations, Title 40, Part 261 (40 CFR 261), Subpart C. The vendor will be asked for information indicating that the product/material cannot be characterized as such. Specific information regarding these hazardous waste characteristics and the laboratory tests that must be utilized to make such determinations can be found in 40 CFR 261.24.

Products exhibiting the ignitable and corrosive characteristics as defined in 40 CFR 261.21 and 261.22, respectively, will be evaluated on a case-by-case basis.

The hazardous waste constituents applied to or placed on the land exceeding the concentrations (mg/L) listed below are prohibited, unless otherwise specified by an existing, approved standard or unless an alternate equivalent product is not commercially and reasonably available.

Arsenic	5.0
Barium	100.0
Benzene	0.5
Cadmium	1.0
Carbon tetrachloride	0.5
Chlorobenzene	100.0
Chloroform	6.0
Chromium	5.0
Cresols (o, m, p)	200.0
1,4-Dichlorobenzene	7.5

1,2-Dichloroethylene	0.5
1,1-Dichloroethylene	0.7
2,4-Dinitrotoluene	0.13
Hexachlorobenzene	0.13
Hexachlorobutadiene	0.5
Hexachloroethane	3.0
Lead	5.0
Mercury	0.2
Methyl ethyl ketone	200.0
Nitrobenzene	2.0

Pentachlorophenol	100.0
Pyridine	5.0
Selenium	1.0
Silver	5.0
Tetrachloroethylene	0.7
Trichloroethylene	0.5
2,4,5-Trichlorophenol	400.0
2,4,6-Trichlorophenol	2.0
Vinyl chloride	0.2

New products and/or materials containing the following chemical constituents from the “Hazardous Waste solvents” list greater than or equal to 10% are prohibited.

Acetone
Benzene
Butanol
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Cresols
Cresylic acid
Cyclohexanone
Dichlorobenzene
2-Ethoxyethanol

Ethyl acetate
Ethyl benzene
Ethyl ether
Isobutanol
Methanol
Methylene chloride
Methyl ethyl ketone
Methyl isobutyl ketone
Nitrobenzene
2-Nitropropane
Pyridine

Tetrachloroethylene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
1,1,2-Trichloro-1,2,2-trifluoroethane
Trichlorofluoromethane
Xylene
other chlorinated fluorocarbons

### Miscellaneous Chemical Constituents

New products and/or materials containing chemical constituents in any concentration from USEPA's 31 Priority Chemicals or USEPA's PBT (Persistent, Bioaccumulative, Toxic) chemicals list are prohibited, unless otherwise specified by an existing, approved standard or unless an alternate equivalent product is not commercially and reasonably available.

Acenaphthene	Hexachlorobenzene	Phenanthrene
Acenaphthylene	Hexachlorobutadiene	Polychlorinated biphenyls (PCBs)
Aldrin	Hexachlorocyclohexane	Polycyclic aromatic compounds (PACs)
Anthracene	Hexachloroethane	Polyaromatic compounds (PAHs)
Benzo(g,h,i)perylene	Isodrin	Pyrene
4-Bromophenyl phenyl ether	Lead	Tetrabromobisphenol A
Cadmium	Mercury	1,2,4,5-Tetrachlorobenzene
Chlordane	Methoxychlor	Toxaphene
Dibenzofuran	Naphthalene	1,2,4-Trichlorobenzene
Dioxin and Furan compounds	Octachlorostyrene	2,4,5-Trichlorophenol
Endosulfan	Pendimethalin	Trifluralin
Fluorene	Pentachlorobenzene	
Heptachlor	Pentachloronitrobenzene	
Heptachlor epoxide	Pentachlorophenol	

New products and/or materials containing the following chemical constituents from the joint EPA-OSHA carcinogenic chemicals list in concentrations greater than or equal to 0.1% are prohibited, unless otherwise specified by an existing, approved standard or unless an alternate equivalent product is not commercially and reasonably available.

Acetaldehyde	Catechol	2,4-D isopropyl ester
Acetamide	Chlorendic acid	2,4-DP
2-Acetylaminofluorene	p-Chloroaniline	2,4-D propylene glycol butyl ether ester
Acrylamide	Chloroform	2,4-D sodium salt
Acrylonitrile	bis-chloromethyl ether	2,4-Diaminoanisole
2-Aminoanthraquinone	Chloromethyl methyl ether	4,4'-Diaminodiphenyl ether
4-Aminoazobenzene	3-Chloro-2-methyl-1-propene	2,4-Diaminotoluene
4-Aminodiphenyl	Chlorophenol compounds	Diaminotoluene (mixed isomers)
1-Amino-2-methylanthraquinone	Chloroprene	Dibenz(a,h)acridine
Amitrole	Chlorothalonil	Dibenz(a,j)acridine
o-Anisidine	p-Chloro-o-toluidine	Dibenz[a,h]anthracene
o-Anisidine hydrochloride	Chromium compounds	7H-Dibenzo(c,g) carbazole
Arsenic compounds	C.I. Acid Red 114	Dibenzo(a,e)pyrene
Asbestos (friable)	C.I. Direct Black 38	Dibenzo(a,h)pyrene
Benz[a]anthracene	C.I. Direct Blue 6	Dibenzo(a,l)pyrene
Benzene	C.I. Direct Brown 95	1,2-Dibromo-3-chloropropane
Benzidine	C.I. Food Red 5	1,2-Dibromoethane
Benzo(b)fluoranthene	C.I. Solvent Yellow 3	1,4-Dichlorobenzene
Benzo(j)fluoranthene	Cobalt compounds	Dichlorobenzene (mixed isomers)
Benzo(k)fluoranthene	Creosote	3,3'-Dichlorobenzidine
Benzo(rst)pentaphene	p-Cresidine	3,3'-Dichlorobenzidine dihydrochloride
Benzo[a]pyrene	Cupferron	3,3'-Dichlorobenzidine sulfate
Benzoic trichloride	2,4-D butoxyethyl ester	Dichlorobromomethane
Beryllium	2,4-D butyl ester	1,2-Dichloroethane
Bis(chloromethyl) ether	2,4-D chlorocrotyl ester	Dichloromethane
1,3-Butadiene	2,4-D 2-ethylhexyl ester	1,3-Dichloropropene
1,2-Butylene oxide	2,4-D 2-ethyl-4-methylpentyl ester	
Carbon tetrachloride	2,4-D	

1,3-Dichloropropylene	1,2,3-Indeno(cd)pyrene	N-Nitrosopiperidine
Dichlorvos	Lead; Inorganic lead compounds	Phenytol
Diepoxybutane	Lindane	Polybrominated biphenyls (PBBs)
Di(2-ethylhexyl) phthalate	Mecoprop	Polychlorinated alkanes (C12, 60% chlorinated)
Diethyl sulfate	Methoxone	Potassium bromate
Diglycidyl resorcinol ether	Methoxone sodium salt	Propane sultone
Dihydrosafrole	Methyl chloromethyl ether	beta-propiolactone
3,3'-Dimethoxybenzidine	5-Methylchrysene	Propyleneimine
3,3'-Dimethoxybenzidine dihydrochloride	4,4'-Methylenebis (2-chloroaniline)	Propylene oxide
3,3'-Dimethoxybenzidine hydrochloride	4,4'-Methylenebis (N,N-dimethyl) benzeneamine	Safrole
4-Dimethylaminoazobenzene	4,4'-Methylenedianiline	Sodium o-phenylphenoxide
7,12-Dimethylbenz[a]anthracene	Michler's ketone	Styrene
3,3'-Dimethylbenzidine	Mustard gas	Styrene oxide
3,3'-Dimethylbenzidine dihydrochloride	alpha-Naphthylamine	2,3,7,8-Tetrachlorodibenzo-p-dioxin
3,3'-Dimethylbenzidine dihydrofluoride	beta-Naphthylamine	Tetrachloroethylene
Dimethylcarbaryl chloride	Nickel; nickel compounds	Thioacetamide
1,1-Dimethyl hydrazine	Nitrilotriacetic acid	4,4'-Thiodianiline
Dimethyl sulfate	4-Nitrobiphenyl	Thiourea
2,4-Dinitrotoluene	Nitrobenzene	Toluene-2,4-diisocyanate
2,6-Dinitrotoluene	Nitrofen	Toluene-2,6-diisocyanate
1,4-Dioxane	Nitrogen mustard	o-Toluidine
1,2-Diphenylhydrazine	4-Nitrobiphenyl	o-Toluidine hydrochloride
Epichlorohydrin	2-Nitropropane	Trichloroethylene
Ethyl acrylate	1-Nitropyrene	2,4,6-Trichlorophenol
Ethyl benzene	N-Nitrosodi-n-butylamine	1,2,3-Trichloropropane
Ethyleneimine	N-nitrosodimethylamine	2,3-Tris(dibromopropyl)phosphate
Ethylene oxide	N-Nitrosodiethylamine	Trypan blue
Ethylene thiourea	Nitrosodimethylamine	Urethane
Formaldehyde	N-Nitrosodi-n-propylamine	Vinyl acetate
Hexamethylphosphoramide	N-Nitroso-N-ethylurea	Vinyl bromide
Hydrazine	N-Nitroso-N-methylurea	Vinyl chloride
Hydrazine sulfate	N-Nitrosomethylvinylamine	2,6-Xylidine
	N-Nitrosomorpholine	
	N-Nitrosornicotine	

If the new products and/or materials have a potential to impact a waterway, the vendor must supply data or other technical information indicating that the use or application will not cause a measurable impact. This evaluation will be based on the values outlined in the table below. The acute freshwater and saltwater Criteria Maximum Concentration values from the USEPA's National Recommended Water Quality Criteria and Virginia DEQ's Water Quality Standards (9 VAC 25-260) will be used for this determination.

Aluminum- 750 µg/L Freshwater	Dieldrin- 0.24 µg/L Freshwater; 0.71 µg/L Saltwater
Arsenic- 340 µg/L Freshwater; 69 µg/L Saltwater	Endrin 0.086 µg/L Freshwater; 0.037 µg/L Saltwater
Chloride- 860,000 µg/L Freshwater	Lindane- 0.95 µg/L Freshwater; 0.16 µg/L Saltwater
Chlorine- 19.0 µg/L Freshwater; 13.0 µg/L Saltwater	Nickel- 180.0 µg/L Freshwater (DEQ); 74.0 µg/L Saltwater
Chlorpyrifos- 0.083 µg/L Freshwater; 0.011 µg/L Saltwater	Parathion- 0.65 µg/L Freshwater
Chromium (III)- 570.0 µg/L Freshwater	Selenium- 20.0 µg/L Freshwater (DEQ); 290.0 µg/L Saltwater
Chromium (VI)- 16.0 µg/L Freshwater; 1,100.0 µg/L Saltwater	Silver- 3.2 µg/L Freshwater; 1.9 µg/L Saltwater
Copper- 13.0 µg/L Freshwater; 4.8 µg/L Saltwater	Tributyltin- 0.46 µg/L Freshwater; 0.37 µg/L Saltwater
Cyanide- 22.0 µg/L Freshwater; 1.0 µg/L Saltwater	Zinc- 120.0 µg/L Freshwater; 90.0 µg/L Saltwater
4,4'-DDT- 1.1 µg/L Freshwater; 0.13 µg/L Saltwater	



For Office Use Only  
VDOT Number: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Assigned Division(s): \_\_\_\_\_

**Virginia Department of Transportation  
Preliminary Information for Product Evaluation**

**The following information is to be included in a submittal package of no more than three pages.**

**Product Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Manufacturer:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**Fax Number:** \_\_\_\_\_

List specific AASHTO, ASTM, MUTCD, requirements the product meets. \_\_\_\_\_

Has this product been evaluated (or currently under evaluation) by the National Transportation Product Evaluation Program, (NTPEP)? \_\_\_\_\_ NTPEP Submittal and Report Number \_\_\_\_\_

Has the product been submitted to another division within the Department? If so, provide contact information. \_\_\_\_\_

Has the product been approved for use by other agencies/states? If so, provide contact information. \_\_\_\_\_

Briefly describe when, where, and how the product would be used as well as the benefits for allowing the use of this type of product. If applicable, describe VDOT's current method of performing such functions. **Product brochures, test reports and manuals will not be accepted in lieu of application.** \_\_\_\_\_